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April 27, 2006

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, Massachusetts 02114

Subject: NPDES Phase II Small MS4 General Permit (MA041027)
Annual Report
Arlington, Massachusetts

To Whom It May Concern:

In accordance with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), please find enclosed the 2006 Annual Report summarizing the status of Arlington's Stormwater Management Program. As required by the NPDES General Permit, a copy of this report has also been submitted to the Massachusetts Department of Environmental Protection, the co-permitting authority for the state of Massachusetts.

Please do not hesitate to contact me with any questions or comments regarding this submission.

Very truly yours,

FAY, SPOFFORD & THORNDIKE, LLC.

By

Dianne E. Velardocchia, PE
Senior Engineer

Enclosures: NPDES PII Small MS4 General Permit
Annual Report

Cc: Teresa DeBenedictis. (for municipal dist.)
Assistant Director of Public Works
Arlington, MA

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Municipality/Organization: Arlington, Massachusetts

EPA NPDES Permit Number: MA041027

MaDEP Transmittal Number: W-040959

Annual Report Number

& Reporting Period: No. 3: May 05-May 06

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Teresa DeBenedictis

Title: Assistant Director of Public Works

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Brian F. Sullivan

Printed Name: Brian Sullivan

Title: Town Manager

Date: 4/27/06

Part II. Self-Assessment

The Town of Arlington has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1-1	Place Educational Information on the Town's Website	Department of Public Works, Town Webmaster	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> ➤ Post stormwater related information on the Town Hall website. ➤ Update website regularly. 	The final Stormwater Management Program (SWMP) was posted on website. Other stormwater related information was posted on Town Hall website.	The Town will continue posting stormwater related information on Town Hall website, including the SWMP Annual Report.
1-2	Conduct Household Hazardous Waste Collection Days	Department of Public Works, Arlington Recycling Committee	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> ➤ Sponsor 8 household hazardous waste collection days/yr. ➤ Develop the <u>Arlington Recycling Program</u> brochure and distribute to all Arlington residents via a mass mailing on an annual basis. ➤ Track the number and type of informational brochures collected by Arlington residents at the DPW and at the booth at Arlington Town Day. ➤ Send 8 press releases advertising the event to the <i>Arlington Advocate</i> and track whether they were published. ➤ Advertise the events on the Town's website. 	The DPW sponsored 8 household hazardous waste collection days at the Minutemen Hazardous Product Facility in Lexington, MA. The events were advertised in the <i>Arlington Advocate</i> and on the Town's website. A brochure on Arlington's recycling program was distributed to new residents. The DPW hosted a booth at Arlington Town Day.	The DPW will continue to sponsor 8 household hazardous waste collection days annually and advertise these events in the <i>Arlington Advocate</i> and on the Town's website. The DPW will continue to host a booth at Arlington Town Day. The DPW will continue distributing a brochure on Arlington's recycling program to residents.
1-3	Intensify the Existing Pet Waste and Waterfowl Management Campaign	Board of Health, Animal Control Officer	Spring '04/'05/'06/'07 <ul style="list-style-type: none"> ➤ Track the number of brochures distributed. ➤ Educate Animal Control Officer on the importance of pet waste and waterfowl management. ➤ Develop an informational press release on pet waste and waterfowl management for the <i>Arlington Advocate</i> and track whether it was published. 	The Town distributed a brochure on waterfowl management during Permit Year 3.	The Town will continue to make the brochure on waterfowl management available to the residents. The Town will educate the Animal Control Officer on the importance of pet waste and waterfowl management and provide educational brochures for the Officer to distribute to violators.
Revised			Removed "Track the number of violations issued annually."		
1-4	Place Educational Information on Arlington Cable Television	Department of Public Works, Arlington Cable Television	Fall '04 – Winter '07/08 <ul style="list-style-type: none"> ➤ Obtain "Oil Leak" and "Fertilizer" PSAs from the Washington State Department of Ecology Water Quality Consortium. ➤ Track how frequently the PSAs are broadcast on ACTV. 	"Don't Feed the Storm Drain – Plop" and "Oil Recycling" PSA's were obtained from Earth 911.	The PSA's will be broadcast on ACTV throughout the permit year.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1-5	Promote Water Conservation Practices for Homeowners	Department of Public Works	Spring '03 –Winter '07/08 <ul style="list-style-type: none"> ➤ Post water conservation posters at Town Hall and the public libraries. ➤ Include water conservation bill inserts with the water bill. ➤ Issue an annual press release to the <i>Arlington Advocate</i> to promote water conservation. 	Posters were hung in the Town Hall and public libraries. Educational displays on water conservation were also posted at the libraries. Rain barrels were sold to residents. Tips for water conservation were included in the water bill. Water conservation was promoted in the <i>Arlington Advocate</i> .	The DPW will continue posting water conservation posters at Town Hall and public libraries and including water conservation tips with the water bill. The DPW will issue an annual press release to the <i>Arlington Advocate</i> to promote water conservation. At DPW Day, brochures on water conservation will be distributed and dye tablets for toilets will be made available to residents.
1-6	Develop a Press Release and Flyer Targeting Community Businesses	Department of Public Works, Town Webmaster	Fall '05/'07 Revise Date to Fall '06/'07 <ul style="list-style-type: none"> ➤ Submit the press release to the <i>Arlington Advocate</i> and track whether it was published. ➤ Submit copies of the informational flyers to the Arlington Chamber of Commerce and track whether it was included in the newsletter. ➤ Post the informational flyer on the Town's website. 	The educational stormwater press release was not developed during Permit Year 3.	The DPW will develop an educational stormwater press release targeting businesses in community for submission to <i>Arlington Advocate</i> . The press release will be converted to a flyer that will be posted on Town's website and will be given to ACC for inclusion in the bimonthly newsletter.
Revised			Implementation schedule revised as shown above.		

1a. Additions

No additions to report at this time.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
2-1	Public Access to SWMP and Receipt of Comments	Department of Public Works, Town Webmaster	Winter '03/04 – Winter '07/08 <ul style="list-style-type: none"> ➤ Make draft SWMP available to the public for the review and comment period. ➤ Finalize SWMP. ➤ Make the final SWMP accessible to the public via the Town's public libraries and website. 	The DPW made the final SWMP available to the public via the Town's public libraries and website, as well as the DPW office at Town Hall and the DPW operations center.	The DPW will continue to make the final SWMP available to the public via the Town's public libraries and website, as well as the DPW office at Town Hall and the DPW operations center.
2-2	Educational Outreach for Spy Pond	Spy Pond Committee, Friends of Spy Pond Park, Planning and Community Development Department	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> ➤ Develop fertilizer flyer and track the number of volunteers involved in its distribution. ➤ Develop door hanger and track the number of volunteers involved in its distribution. ➤ Post Spy Pond-related information on the Spy Pond website and update website regularly. ➤ Host booths at Arlington Town Day 	Fertilizer flyers were developed and distributed. Spy Pond-related information was posted on Spy Pond website. There were booths at Arlington Town Day.	Educational outreach will continue by distributing fertilizer flyers and hosting booths at Arlington Town Day. Spy Pond-related information will continue to be posted on the Spy Pond website.
Revised			Remove "Sponsor ecological gardening classes and track the number of participants" because of the unavailability of instructors.		
2-3	Sponsor Annual Cleanup at Spy Pond	Spy Pond Committee, Friends of Spy Pond Park, Department of Public Works, Planning and Community Development Dept.	Spring '03/'04/'05/'06/'07 <ul style="list-style-type: none"> ➤ Track the number of cleanup volunteers and supporting businesses. ➤ Track the quantity and types of waste collected as a result of the cleanup event. 	A clean-up of Spy Pond occurred on May 14 –15, 2005 along the south side of the pond. Volunteers also constructed stone paths along the south side of the pond in an effort to minimize erosion. On April 13, 2006, there was a clean-up on the Route 2 side of Spy Pond.	The annual clean-up will occur on May 13, 2006 along the south side of the pond. Volunteers will also extend the stone paths that were constructed last year.
2-4	Sponsor Storm Drain Marking Activities at Spy Pond	Spy Pond Committee, Planning and Community Development Department	Spring '05 <ul style="list-style-type: none"> ➤ Identify areas where marking will take place and establish schedule for the activity. ➤ Track the number of storm drains marked each year. ➤ Track the number of volunteers assisting in the marking activity. ➤ Provide maintenance to previously installed markers as necessary. ➤ Publicize storm drain marking event(s) via a press release to the <i>Arlington Advocate</i>. 	As part of a 319 Federal Grant, Arlington and Belmont will jointly mark storm drains to Spy Pond during the Spring 2006 (end of Permit Year 3/beginning of Permit Year 4). In Arlington, this task will be performed by a school group. The storm drain marking event will be publicized via a press release to the <i>Arlington Advocate</i> .	As part of a 319 Federal Grant, Arlington and Belmont will jointly mark storm drains to Spy Pond during the Spring 2006 (end of Permit Year 3/beginning of Permit Year 4).

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
2-5	Sponsor Annual Clean-up at Arlington Reservoir	Arlington Reservoir Committee, Department of Public Works	Spring '03/'04/'05/'06/'07 <ul style="list-style-type: none"> ➤ Track the number of cleanup volunteers and supporting businesses. ➤ Track the quantity and types of waste collected as a result of the cleanup event. 	A clean-up of Arlington Reservoir did not occur during Permit Year 3 because it was under construction. Part of the proposed work included wetland replication.	A clean-up of Arlington Reservoir will be conducted on April 22, 2006.
2-6	Conservation Land Stewards	Arlington Conservation Commission	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> ➤ Track the number of Land Steward volunteers. ➤ Maintain records of major activities, such as clean-ups, at individual sites. ➤ Develop an informational press release on the Land Steward Program for the <i>Arlington Advocate</i> and track whether it was published. ➤ Develop an informational brochure on the Land Steward Program and track the number of brochures collected by residents. 	The annual meeting was held on March 21, 2006. This meeting, which was advertised in the <i>Arlington Advocate</i> and on several local email lists, included a speaker on stewardship lessons from Habitat in Belmont and a discussion of the installation of new conservation land signs. A trail project and cleanup was performed at Meadowbrook Park. Also during Permit Year 3, the Conservation Land Stewards had a Town Day booth and continued to coordinate stewards to inspect and cleanup sites through Town.	The Annual Meeting will be held in the Spring 2007. This meeting will be advertised in the <i>Arlington Advocate</i> . The Conservation Land Stewards will have a Town Day booth and will coordinate the cleanup of conservation sites throughout Town. Other proposed activities include installing "Arlington Conservation Land" signs, selective removal of invasive plants, restoration planting with native plants, increasing neighborhood awareness and appreciation of conservation lands, and updating the "Walking in Arlington" guide book.
2-7	A-B-C Stormwater Flooding Board to Address Issues in the Little River and Alewife Brook Areas	Board of Selectmen, Town Webmaster	Spring '04 – Winter '07/08 <ul style="list-style-type: none"> ➤ Execute the Environmental Joint Powers Agreement. ➤ A-B-C Stormwater Flooding Board to meet throughout the permit term. ➤ Information and status of Board's activities to be reported on Town website and in the <i>Arlington Advocate</i>. 	The State ratified the JPA. Monitoring activities along the Alewife Brook commenced. As a related activity, the A-B-C group sent letters to the DCR regarding their concern about downstream flooding in the Aberjona River, in response to a flooding study prepared for the Town of Winchester.	Data collection activities will continue along the Alewife Brook. Analysis of the data will also commence. Information regarding the Board's activities to be posted on the Town's website and in the <i>Arlington Advocate</i> .
2-8	Conduct Lawn Care/Landscaping Survey in Spy Pond Watershed	Spy Pond Committee, Planning and Community Development Department	Summer '05/'06 <ul style="list-style-type: none"> ➤ Develop and distribute survey. ➤ Send a press release explaining the lawn care/landscaping survey to the <i>Arlington Advocate</i>. ➤ Track the number of completed surveys. ➤ Compile surveys to develop future educational outreach materials. 	Under a 319 Federal Grant, this survey was done jointly with Belmont. Approximately 6% of the population responded.	The surveys will be compiled to develop future educational outreach materials. In addition, neighborhood meetings and a town-wide meeting will be held to discuss the findings of the survey.

2a. Additions

No additions to report at this time.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3-1	Maintain Outfall Location Map	Department of Public Works	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> ➤ Update the outfall location map if there are any changes to the stormwater drainage system during the permit term. 	Updated the outfall location map as required.	Update the outfall location map as required.
3-2	Revision of Existing General and Zoning Bylaws	Planning and Community Development Department, Arlington Conservation Commission, Engineering Division of the Department of Public Works	Spring '04 – Winter '07/08 <ul style="list-style-type: none"> ➤ Review Town's existing General and Zoning Bylaws. ➤ Draft revised bylaws so that they fulfill the regulatory requirements of NPDES Phase II Minimum Control Measures 3, 4, and 5. ➤ Have revised bylaws available for public comment to gauge public acceptance and revise as necessary. ➤ Present revised bylaws to Town Meeting for adoption. ➤ Post revised bylaws on Town's website. 	At Town Meeting 2005, a warrant article passed that revised the Environmental Design Review standards to require that stormwater be treated on-site as much as possible. Enforcement of these revisions commenced. In addition, the Planning and Community Development Department met with the Conservation Commission and Engineering to develop stormwater-related warrant article for 2006 Town Meeting.	The Town will try to pass Article 7 at Town Meeting 2006, which will amend the bylaws to control stormwater runoff at new development and redevelopment sites Townwide. The revised bylaws would include a program aimed at reducing flooding, promoting soil recharge, and reducing pollution of the Town's water resources to the extent practicable. Projects that increase impervious area would be subject to these amended bylaws.
3-3	Implement an Illicit Discharge Detection and Elimination Plan	Department of Public Works	Winter '04/'05 – Winter '07/08 Revise Date to Spring '06 – Winter '07/08 <ul style="list-style-type: none"> ➤ Develop an Illicit Discharge Detection and Elimination Plan. ➤ Conduct dry-weather field screening of outfalls and track the number of surveys indicating a possible illicit connection. ➤ Trace the source of potential illicit discharges. ➤ Track the number of illicit connections found. ➤ Track the number of illicit connections repaired/replaced. ➤ Report on the success of obtaining alternative funding to assist in illicit connection removal. 	No activities were performed on this BMP during Permit Year 3.	The existing Illicit Discharge Detection and Elimination Plan will be reviewed and modified as required to be consistent with the NPDES Phase II regulations.
Revised			Implementation schedule revised as shown above.		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3-4	Rehabilitate and Replace Sanitary Sewer Pipes	Department of Public Works	Spring '03 – Fall '05 Revise dates to Spring '03 – Fall '06 <ul style="list-style-type: none"> ➤ Rehabilitation/replacement of sanitary sewer pipes exfiltrating wastewater. ➤ Maintain documentation of construction activities and re-sampling. 	Sewer pipes in Landsdowne Road, Hemlock Street, and Pine Street were rehabilitated. The developer of the Symmes Hospital performed I/I removal activities based on the results of a survey. The State re-lined two MWRA sewer mains (20-inch and 36-inch diameter) along Mill Brook from Lexington town line to Grove Street. Sewer pipes in the Lafayette Boulevard area were cleaned and televised. In addition, 225 feet of sewer pipe were replaced along the frontage road to Route 2.	The sewer replacement along Sunnyside Avenue will be designed. In addition, there will be sewer cleaning and televising near the Winchester-Arlington line, including Ridge Street, Columbia Road, Kimball Road, and the Mystic Valley Parkway.
Revised			Implementation schedule revised as shown above.		

3a. Additions

3-5	Replacement and Maintenance of Mill Brook Culvert	Department of Public Works	Summer '05 – Winter '07/08 <ul style="list-style-type: none"> ➤ Replace Mill Brook Culvert near Grove Street. ➤ Maintain culvert as required. 	The existing section of the culvert were maintained and repaired as necessary.	The existing section of the culvert will be maintained and repaired as necessary.
3-6	Maintenance of Town Waterbodies	Department of Public Works	Summer '06 – Winter '07/08 <ul style="list-style-type: none"> ➤ Establish a fund for the maintenance of Town waterbodies. ➤ Maintain waterbodies as required. 	No activities were performed on this BMP during Permit Year 3.	The Town will try to pass Article 24 at Town Meeting 2006 , which will establish a special fund to provide maintenance, treatment, and oversight of the Town's waterbodies.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3-2	Revision of Existing General and Zoning Bylaws			See Section 3: Illicit Discharge Detection and Elimination	
4-1	Develop a Site Inspection Form and Conduct Site Inspections	Department of Public Works (Engineering Section)	Spring '05 – Winter '07/08 <ul style="list-style-type: none"> ➤ Develop an ESC Site Inspection Form. ➤ Track the frequency of inspections conducted for each site. ➤ Track the completion of inspection forms. ➤ Track the number of failed ESC BMPs discovered on each site. ➤ Develop a formalized program to review and inspect proposed development plans for stormwater runoff controls and ESC best management practices. ➤ Maintain records of the reviews and inspections. 	The Engineering Department reviewed and inspected proposed development plans for stormwater runoff controls and ESC best management practices. However, this was not a formalized program based on Town regulations. Records were maintained.	Passage of Article 7 at Town Meeting 2006 (see BMP 3-2) will formalize the Engineering Department's role of reviewing and inspecting proposed development plans for stormwater runoff controls and ESC best management practices. The Engineering Department will continue to review projects based on the Town's new regulations. Records will be maintained.
Revised			An ESC Site Inspection Form will not be developed. The Engineering Department currently reviews and inspects proposed projects for stormwater runoff controls and ESC best management practices, but it is not a formalized process based on Town regulations. This BMP is being revised to formalize the process based on Town Meeting warrant articles for 2005 and 2006.		
4-2	Develop and Implement a Citizen Tip Line	Department of Public Works, Town Webmaster	Fall '05 – Winter '07/08 <ul style="list-style-type: none"> ➤ Establish the Citizen Tip Line. ➤ Advertise the Citizen Tip Line. ➤ Track the number of complaints received via the Citizen Tip Line. ➤ Track the problems/incidents remedied as a result of the Citizen Tip Line. 	The Town currently has a software program, Trackwise, to receive and route calls from citizens. The program was modified to accept calls regarding stormwater issues..	The Town will transition to a new system, Web QA, which will permit residents to make stormwater complaints/comments on the Town's website.

4a. Additions

No additions to report at this time.

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3-2	Revision of Existing General and Zoning Bylaws			See Section 3: Illicit Discharge Detection and Elimination	
5-1	Arlington Redevelopment Board Stormwater Design Guidelines	Planning and Community Development Department Arlington Redevelopment Board	Spring '04 <ul style="list-style-type: none"> ➤ Obtain approval of the handbook by the Arlington Redevelopment Board. ➤ Track the distribution of handbook to developers. 	No activities were performed on this BMP during Permit Year 3.	No activities are planned for Permit Year 4.
Revised			The Town is currently re-evaluating the need for this BMP in light of the proposed changes to Environmental Design Review Standards (See BMP 3-2) and possible future stormwater management related warrant articles. The Town believes that developers and their consultants should be familiar with stormwater BMPs and not require a handbook from the Town.		

5a. Additions

No additions to report at this time.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6-1	Develop a Formal Training Program for DPW Staff	Department of Public Works	Fall '04 – Winter '07/08 Revise dates to Fall '06 – Winter '07/08 <ul style="list-style-type: none"> ➤ Establish a formal training program for DPW employees. ➤ Conduct training sessions with all current employees. ➤ Train all new DPW employees in accordance with the training program requirements. ➤ Track employee training activities and participation trained. ➤ Conduct refresher training for employees after every two years of employment. 	A formal training program was not developed because of staff turnover.	The DPW will develop a formal training program for DPW employees and commence training sessions.
Revised			Implementation schedule revised as shown above.		
6-2	Catch Basin Cleaning Program	Department of Public Works	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> ➤ Track the catch basins that are cleaned each year, including the leaching catch basins, Vortech devices and oil/water separator. ➤ Maintain a log of the disposed materials 	The DPW completed the annual catch basin cleaning program as scheduled. The DPW maintained a log of disposed materials.	The DPW will continue the annual catch basin cleaning program.
6-3	Parking Lot and Street Sweeping Program	Department of Public Works	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> ➤ Track the streets and lots that are swept each year. ➤ Maintain a log of the disposed materials 	The DPW completed annual parking lot and street sweeping program as scheduled. The Town has been divided into 35 districts and this grid system is used to schedule the street sweeping. The DPW maintained a log of disposed materials.	The DPW will continue annual parking lot and street sweeping program. Using GIS, the grid system and sweeping schedule will be placed on the Town's website so that residents will know when streets will be swept.
6-4	Implement Stormwater Pollution Prevention Plan	Department of Public Works	Fall '04 – Winter '07/08 Revise dates to Fall '06 – Winter '07/08 <ul style="list-style-type: none"> ➤ Review the recommendations outlined in Table 5 of the SWPPP. ➤ Develop a schedule to implement these recommendations. ➤ Track progress in implementing recommendations. 	No activities were performed during Permit Year 3 because of staff turnover.	The DPW will review the recommendations outlined the SWPPP. The DPW will develop a schedule of implementation of the recommendations and begin implementation.
Revised			Implementation schedule revised as shown above.		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6-5	Vehicle and Equipment Cleaning Policy	Department of Public Works	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> ➤ Continue to wash vehicles and equipment indoors. ➤ Incorporate policy requirements into the DPW employee-training program. ➤ Construct a new wash bay. 	The DPW washed vehicles and equipment indoors to the extent possible.	The DPW will continue to wash vehicles and equipment indoors to the extent possible. This policy will be incorporated into the DPW employee-training program. A car/vehicle wash facility is proposed for the CIP for 2007.
6-6	Develop a Landscaping and Lawn Care Policy	Department of Public Works	Spring '05 – Winter '07/08 Revise dates to Spring '06 – Winter '07/08 <ul style="list-style-type: none"> ➤ Develop and implement a landscaping and lawn care policy. ➤ Place policy in the DPW employee-training manual. ➤ Document employee training and periodic re-training. 	No activities were performed during Permit Year 3 because of staff turnover.	The DPW will develop and implement a landscaping and lawn care policy. The policy will be incorporated into the DPW employee training manual.
Revised			Implementation schedule revised as shown above.		
6-7	Replace Stormwater Drainage System Along Summer Street	Department of Public Works	Summer '04 – Fall '06 <ul style="list-style-type: none"> ➤ Install new stormwater drainage system in Summer Street. ➤ Maintain records of water quality sampling from the detention basin. 	Installation of the new stormwater drainage system in Summer Street continued during Permit Year 3.	Installation of the new stormwater drainage system in Summer Street will be completed during Permit Year 4.
Revised			Remove measurable goal, "Maintain records of water quality sampling from the detention basin."		
6-8	Maintenance of the Detention Basin at Reed's Brook	Department of Public Works	Spring '04 – Winter '07/08 <ul style="list-style-type: none"> ➤ Develop a maintenance plan for the detention basin at the Reed's Brook site. ➤ Educate DPW employees on the proper maintenance of the detention basin and document training and periodic re-training. ➤ Maintain records of maintenance activities. ➤ Maintain records of water quality sampling from the detention basin. 	The DPW commenced maintenance activities for the detention basin at the Reed's Brook site. Records of water quality sampling were maintained (location SW-3).	The DPW will continue maintenance activities for the detention basin at the Reed's Brook site. Water quality sampling will continue to be performed.
Revised			Add measurable goal, "Maintain records of water quality sampling from the detention basin."		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6-9	Install Leaching Catch Basins In Spy Pond Watershed	Planning and Community Development Department Department of Public Works	Summer '05/06 <ul style="list-style-type: none"> ➤ Develop plans for leaching catch basins. ➤ Install leaching catch basins. 	A Stormceptor device was installed at the Spy Pond Playground during Spring 2005. As part of a 319 Federal Grant, Arlington and Belmont will jointly install 11 leaching catch basins and 4 baffle manholes along the southern side of Spy Pond (end of Permit Year 3/beginning of Permit Year 4).	As part of a 319 Federal Grant, Arlington and Belmont will jointly install 11 leaching catch basins and 4 baffle manholes along the southern side of Spy Pond (end of Permit Year 3/beginning of Permit Year 4). With a DCR grant, Town will install 5 leaching catch basins along the west and north sides of Spy Pond.

6a. Additions

No additions to report at this time.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

NOT APPLICABLE TO THE TOWN OF ARLINGTON

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

On a semi-annual basis, ground and surface water sampling is performed at the Reeds Brook Landfill. Surface water samples are collected from four sampling locations by dipping the bottle directly into the water. Sampling is taken at the following four locations:

SW-1 – Manhole east of landfill along Wright Street

SW-2 – Wetlands located east of landfill.

SW-3 – Stream located northwest of landfill at Reed Street

SW-4 – Culvert channel 50 yards east of SW-3

The attached sheets provide a summary of the water quality sampling from June 24, 2003 to December 28, 2005.

Surface Water Results

SAMPLE LOCATION Date Sampled	SW-1						SW Criteria
	6/24/2003	12/15/2003	6/15/2004	12/9/2004	6/27/2005	12/28/2005	
Indicator Parameters: ppm							
Temperature C (in situ)	17.4	4.0	19.6	7.5	19.7	8.8	<28.3
pH (in situ)	7.28	7.10	9.00	7.80	8.20	8.50	6.5-8.3
Specific Conductance (in situ)	735	2025	805	806	1291	814	
Dissolved Oxygen (in situ)	6.82	9.65	6.77	8.1	6.93	8.86	>5.0
Alkalinity	50	37	40	53	47	45	
Chemical Oxygen Demand	11	25	13	-	-	-	
Chloride	268.0	646.0	208.0	231.0	219.0	233.0	
Nitrate	2.40	1.97	2.61	2.29	2.23	2.56	
Sulfate	22	35	20	25	17	23	
Total Cyanide	-	-	-	-	-	-	
Total Dissolved Solids	470	1120	518	442	470	444	
Inorganics: ppm							
Arsenic	-	-	-	-	-	-	
Barium	-	0.032	-	-	-	-	
Cadmium	-	-	-	-	-	-	
Chromium	-	-	-	-	-	-	
Copper	-	-	-	-	-	-	
Iron	0.840	0.729	0.747	0.341	0.601	0.196	
Lead	-	-	-	-	0.0089	-	
Manganese	0.070	0.058	0.038	0.032	0.034	0.037	
Mercury	-	-	-	-	-	-	
Selenium	-	-	-	-	-	-	
Silver	-	-	-	-	-	-	
Zinc	-	-	0.053	-	-	-	
EPA TEST METHOD 8260							
Volatile Organic Compounds: ppb							
1,2-Dichlorobenzene	-	-	-	-	-	-	
1,4-Dichlorobenzene	-	-	-	-	-	-	
Benzene	-	-	-	-	-	-	
Carbon disulfide	-	-	-	-	-	-	
Chlorobenzene	-	-	-	-	-	-	
Chloroform	-	-	-	-	1.6	-	
Methyl-t-butyl ether	1.59	-	-	-	-	-	
Tolulene	-	-	-	-	-	-	

NT=Not Tested
 "- " = Not Detected

Surface Water Results

SAMPLE LOCATION Date Sampled		SW-2					SW Criteria
		6/24/2003	6/15/2004	12/9/2004	6/27/2005	12/28/2005	
Indicator Parameters: ppm							
Temperature C (in situ)	17.4	22.1	5.2	26.6	1.6	<28.3	
pH (in situ)	8.01	7.80	7.40	7.90	8.10	6.5-8.3	
Specific Conductance (in situ)	663	960	430.9	1052	685		
Dissolved Oxygen (in situ)	3.18	2.98	4.79	4.82	13.7	>5.0	
Alkalinity	50	66	62	38	46		
Chemical Oxygen Demand	31	166	50	59	101		
Chloride	196.0	262.0	91.0	277.0	308.0		
Nitrate	0.27	0.64	0.35	0.59	0.27		
Sulfate	20	-	38	17	29		
Total Cyanide	0.06	-	-	-	-		
Total Dissolved Solids	438	620	272	592	578		
Inorganics: ppm							
Arsenic	-	-	-	-	-		
Barium	0.090	0.177	0.068	0.493	0.175		
Cadmium	-	-	-	0.006	0.007		
Chromium	-	-	-	-	-		
Copper	-	0.028	-	0.057	0.059		
Iron	1.480	19.100	0.738	24.300	7.570		
Lead	0.008	0.036	-	0.221	0.055		
Manganese	0.110	0.609	0.058	0.435	0.103		
Mercury	-	0.001	-	-	-		
Selenium	-	-	-	-	-		
Silver	-	-	-	-	-		
Zinc	0.320	0.364	0.175	1.580	0.531		
EPA TEST METHOD 8260							
Volatile Organic Compounds: ppb							
1,2-Dichlorobenzene	-	-	-	-	-		
1,4-Dichlorobenzene	-	-	-	-	-		
Benzene	-	-	-	-	-		
Carbon disulfide	-	-	-	-	-		
Chlorobenzene	-	-	-	-	-		
Methyl-t-butyl ether	-	-	-	-	-		
Tolulene	-	5.4	-	2.6	-		

NT=Not Tested

"-" = Not Detected

Surface Water Results

SAMPLE LOCATION Date Sampled	SW-3						SW Criteria
	6/24/2003	12/15/2003	6/15/2004	12/9/2004	6/27/2005	12/28/2005	
Indicator Parameters: ppm							
Temperature C (in situ)	20.0	1.8	23.0	7.3	30.4	2.8	<28.3
pH (in situ)	6.25	6.82	7.10	7.50	7.10	7.23	6.5-8.3
Specific Conductance (in situ)	533	1026	1058	812	1013	1025	
Dissolved Oxygen (in situ)	3.56	12.71	2.47	5.83	4.53	4.99	>5.0
Alkalinity	60	59	152	95	114	96	
Chemical Oxygen Demand	16	24	28	16	23	10	
Chloride	132.0	586.0	243.0	181.0	214.0	229.0	
Nitrate	0.93	0.83	0.28	0.97	0.36	1.39	
Sulfate	24	75	16	24	12	22	
Total Cyanide	-	-	-	-	-	-	
Total Dissolved Solids	356	1020	608	408	544	488	
Inorganics: ppm							
Arsenic	-	-	-	-	-	-	
Barium	-	0.036	0.090	-	0.064	0.072	
Cadmium	-	-	-	-	-	-	
Chromium	-	-	-	-	-	-	
Copper	-	-	-	-	-	-	
Iron	2.550	2.130	1.070	3.130	3.800	5.790	
Lead	-	-	-	-	-	-	
Manganese	0.370	0.381	0.530	0.326	0.403	0.404	
Mercury	-	-	-	-	-	-	
Selenium	-	-	-	-	-	-	
Silver	-	-	-	-	-	-	
Zinc	0.090	0.050	-	-	-	-	
EPA TEST METHOD 8260							
Volatile Organic Compounds: ppb							
1,2-Dichlorobenzene	-	-	-	-	-	-	
1,4-Dichlorobenzene	-	-	-	-	-	-	
Benzene	-	-	-	-	-	-	
Carbon disulfide	3.51	-	-	-	-	-	
Chlorobenzene	-	-	-	-	-	1.2	
Methyl-t-butyl ether	-	1.94	-	-	-	-	
Tolulene	-	-	-	-	-	-	

NT=Not Tested

"-" = Not Detected

Surface Water Results

SAMPLE LOCATION Date Sampled	SW-4					SW Criteria
	6/24/2003	12/15/2003	6/15/2004	12/9/2004	12/28/2005	

Indicator Parameters: ppm

Temperature C (in situ)	16.4	4.4	14.9	8.9	2.0	<28.3
pH (in situ)	6.50	6.68	6.90	8.00	7.05	6.5-8.3
Specific Conductance (in situ)	1021	1452	1492	1386	1526	
Dissolved Oxygen (in situ)	0.72	7.36	2.63	0.74	4.89	>5.0
Alkalinity	171	112	186	105	100	
Chemical Oxygen Demand	38	21	61	62	34	
Chloride	364.0	387.0	270.0	377.0	644.0	
Nitrate	3.40	1.48	4.92	2.55	5.05	
Sulfate	33	42	12	89	45	
Total Cyanide	-	-	-	-	-	
Total Dissolved Solids	822	766	722	782	1170	

Inorganics: ppm

Arsenic	-	-	-	-	-	
Barium	0.140	0.083	0.139	0.143	0.165	
Cadmium	-	-	-	-	-	
Chromium	-	-	-	-	-	
Copper	-	-	-	-	-	
Iron	7.150	6.050	17.300	17.600	9.010	
Lead	-	0.007	-	0.037	-	
Manganese	0.680	0.438	0.850	0.818	0.787	
Mercury	-	-	-	-	-	
Selenium	-	-	-	-	-	
Silver	-	-	-	-	-	
Zinc	-	0.067	-	0.083	-	

EPA TEST METHOD 8260

Volatile Organic Compounds: ppb

1,2-Dichlorobenzene	10.1	-	9.4	11.6	12.1	
1,4-Dichlorobenzene	5.51	-	3.7	4.8	6.4	
Benzene	1.9	-	2.4	2.2	2.6	
Carbon disulfide	9.93	-	-	-	-	
Chlorobenzene	65.2	2.14	45	58.6	79	
Methyl-t-butyl ether	-	-	1.1	-	-	
Toluene	-	-	3.8	-	-	

NT=Not Tested

"-" = Not Detected

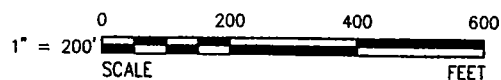


PROPOSED

- * SOIL VAPOR SAMPLE
● PERIMETER GAS MONITORING WELL

EXISTING

- MW-3 ④ GROUNDWATER MONITORING WELL
SW-2 ④ SURFACE WATER MONITORING
B-2 ④ BORING LOCATION



TOWN OF ARLINGTON, MASSACHUSETTS
REEDS BROOK SITE DRAINAGE IMPROVEMENTS AND APPURTENANT WORK

FIGURE 1
LOCATION OF SOIL VAPOR SAMPLES
AND PERIMETER GAS MONITORING WELLS

SCALE: 1" = 200'

SN

APR. 20, 2001

CZar1901.dwg

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	6%
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y – 2000 ft
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	8
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

In Place
Prior to
Phase II

Under
Review

Drafted

Adopted

Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management			X	
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	123
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	100%
% of population on septic systems	(%)	0%

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	3
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	3
Total number of structures cleaned	(#)	3765
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	Y
Automatic or Zero-velocity spreaders used	(y/n)	N
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	Y